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EXAMINER

CARLSON, KAREN C

ART UNIT PAPER NUMBER

1653

DATE MAILED: 12/19/2002

20

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/462,517

Applicant(s)

ZUKER ET AL.

Examiner

Karen Cochrane Carlson, Ph.D.

Art Unit

1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-18, 20-40 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claims 1-18 and 20-40 are currently pending.

Restriction is required under 35 U.S.C. 121 and 372.

The Examiner apologizes to Applicants for this third restriction requirement.

At page 13, line 11, transducisome protein refers to a protein of the transducisome proteins of the sequence listing or another PDZ domain-containing protein that binds signal transduction proteins. The sequence listing provides eleven sequences describing transducisome proteins. These sequences differ in structure. Also at page 14, the signal transduction proteins bound by transducisome proteins include GPCRs, tyrosine kinase receptors, tyrosine phosphatase receptors, ion channels, phospholipases, adenylate cyclases, kinases, and G-proteins. Therefore, transducisome protein differ in function because these proteins bind to different signal transduction proteins.

It is also art-recognized that PDZ domain-containing proteins vary in structure and in function. For example, Doyle et al. (1996; Current Biology 6(11): 1385-1388) teach that one or more copies of this 80-90 amino acid PDZ motif have been identified in over 50 different proteins which for the most part appear unrelated to each other (page 1385, col. 1, para. 2).

Therefore, Applicants admit and the prior art concurs that the transducisome proteins differ in structure and in function. For this restriction, the Examiner will incorporate the definition of transducisome protein as set forth in the specification into the claims. If Applicants traverse the restriction requirement and wish other sequences to be included as a single invention, Applicants should choose a single sequence for search and declare that all other sequences are obvious over this chosen sequence. *Note that only this single chosen sequence will be searched regardless if all 11+ sequences are placed into the same invention.* Note that this is not a species election.

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This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Invention I: Fly comprising -

Group 1, claim(s) 1 and 2, drawn to SEQ ID NO: 1.

Group 2, claim(s) 1 and 2, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 1 and 2, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 1 and 2, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 1 and 2, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 1 and 2, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 1 and 2, drawn to SEQ ID NO: 8 (InaD-3).

Group 8, claim(s) 1 and 2, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 1 and 2, drawn to SEQ ID NO: 10 (InaD-1).

Group 10, claim(s) 1 and 2, drawn to SEQ ID NO: 11 (InaD-5).

Group 11, claim(s) 1 and 2, drawn to SEQ ID NO: 12 (InaD-2).

Group 12, claim(s) 1 and 2, drawn to SEQ ID NO: 13 (InaD-4).

Group 13, claim(s) 1 and 2, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention II: Cell comprising -

Group 1, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 1.

Group 2, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 6 (dlg-3).

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Group 6, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 8 (InaD-3).

Group 8, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 10 (InaD-1).

Group 10, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 11 (InaD-5).

Group 11, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 12 (InaD-2).

Group 12, claim(s) 3-5 and 30-34, drawn to SEQ ID NO: 13 (InaD-4).

Group 13, claim(s) 3-5 and 30-34, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention III: Polynucleotide encoding -

Group 1, claim(s) 6-8, drawn to SEQ ID NO: 1.

Group 2, claim(s) 6-8, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 6-8, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 6-8, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 6-8, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 6-8, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 6-8, drawn to SEQ ID NO: 8 (InaD-3).

Group 8, claim(s) 6-8, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 6-8, drawn to SEQ ID NO: 10 (InaD-1).

Group 10, claim(s) 6-8, drawn to SEQ ID NO: 11 (InaD-5).

Group 11, claim(s) 6-8, drawn to SEQ ID NO: 12 (InaD-2).

Group 12, claim(s) 6-8, drawn to SEQ ID NO: 13 (InaD-4).

Group 13, claim(s) 6-8, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

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Invention IV: Protein encoding -

Group 1, claim(s) 9-13, drawn to SEQ ID NO: 1.

Group 2, claim(s) 9-13, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 9-13, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 9-13, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 9-13, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 9-13, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 9-13, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 9-13, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 9-13, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 9-13, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 9-13, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 9-13, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 9-13, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention V: method for identifying modulators of signal transduction -

Group 1, claim(s) 14 and 15, drawn to SEQ ID NO: 1.

Group 2, claim(s) 14 and 15, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 14 and 15, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 14 and 15, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 14 and 15, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 14 and 15, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 14 and 15, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 14 and 15, drawn to SEQ ID NO: 9 (InaD-1).

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Group 9, claim(s) 14 and 15, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 14 and 15, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 14 and 15, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 14 and 15, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 14 and 15, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention VI: method for identifying modulators of signal transduction, increasing expression of transducin protein -

Group 1, claim(s) 16-20, drawn to SEQ ID NO: 1.

Group 2, claim(s) 16-20, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 16-20, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 16-20, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 16-20, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 16-20, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 16-20, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 16-20, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 16-20, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 16-20, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 16-20, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 16-20, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 14 and 15, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention VII: method for identifying modulators of cell surface receptors

Group 1, claim(s) 21, drawn to SEQ ID NO: 1.

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Group 2, claim(s) 21, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 21, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 21, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 21, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 21, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 21, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 21, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 21, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 21, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 21, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 21, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 21, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention VIII: method for identifying modulators ion channels -

Group 1, claim(s) 22, drawn to SEQ ID NO: 1.

Group 2, claim(s) 22, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 22, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 22, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 22, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 22, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 22, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 22, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 22, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 22, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 22, drawn to SEQ ID NO: 12 (inaD-2).

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Group 12, claim(s) 22, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 22, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention IX: method for identifying modulators of transducin proteins -

Group 1, claim(s) 23, drawn to SEQ ID NO: 1.

Group 2, claim(s) 23, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 23, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 23, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 23, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 23, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 23, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 23, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 23, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 23, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 23, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 23, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 23, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention X: method for detecting protein-protein interaction -

Group 1, claim(s) 24-27, drawn to SEQ ID NO: 1.

Group 2, claim(s) 24-27, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 24-27, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 24-27, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 24-27, drawn to SEQ ID NO: 6 (dlg-3).

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Group 6, claim(s) 24-27, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 24-27, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 24-27, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 24-27, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 24-27, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 24-27, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 24-27, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 24-27, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention XI: method for identifying modulators of ion channels -

Group 1, claim(s) 28, drawn to SEQ ID NO: 1.

Group 2, claim(s) 28, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 28, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 28, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 28, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 28, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 28, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 28, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 28, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 28, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 28, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 28, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 28, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention XII: method for identifying modulators of GPCRs -

Group 1, claim(s) 29, drawn to SEQ ID NO: 1.

Group 2, claim(s) 29, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 29, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 29, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 29, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 29, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 29, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 29, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 29, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 29, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 29, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 29, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 29, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention XIII: chemicals that prevents binding of transducisome protein with signal transduction protein -

Group 1, claim(s) 35, drawn to SEQ ID NO: 1.

Group 2, claim(s) 35, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 35, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 35, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 35, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 35, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 35, drawn to SEQ ID NO: 8 (inaD-3).

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Group 8, claim(s) 35, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 35, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 35, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 35, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 35, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 35, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention XIV: chemicals identified by modulating signal transduction -

Group 1, claim(s) 36a, drawn to SEQ ID NO: 1.

Group 2, claim(s) 36a, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 36a, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 36a, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 36a, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 36a, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 36a, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 36a, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 36a, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 36a, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 36a, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 36a, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 36a, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention XV: chemicals identified by modulating signal transduction -

Group 1, claim(s) 36b, drawn to SEQ ID NO: 1.

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Group 2, claim(s) 36b, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 36b, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 36b, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 36b, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 36b, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 36b, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 36b, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 36b, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 36b, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 36b, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 36b, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 36b, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention XVI: method of treatment, administration of chemical that modulates transducisome protein associations -

Group 1, claim(s) 37 and 40, drawn to SEQ ID NO: 1.

Group 2, claim(s) 37 and 40, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 37 and 40, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 37 and 40, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 37 and 40, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 37 and 40, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 37 and 40, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 37 and 40, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 37 and 40, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 37 and 40, drawn to SEQ ID NO: 11 (inaD-5).

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Group 11, claim(s) 37 and 40, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 37 and 40, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 37 and 40, drawn to another PDZ domain-containing protein that binds to signal transduction proteins. Applicants should state which protein that they would like to have searched and provide the sequence for search, being careful not to add new matter into the specification.

Invention XVII: method for modulating signal transduction in a cell with a chemical that modulates transducosome protein associations -

Group 1, claim(s) 38 and 39, drawn to SEQ ID NO: 1.

Group 2, claim(s) 38 and 39, drawn to SEQ ID NO: 3 (PSD-1).

Group 3, claim(s) 38 and 39, drawn to SEQ ID NO: 4 (PSD95-2).

Group 4, claim(s) 38 and 39, drawn to SEQ ID NO: 5 (PSD95-3).

Group 5, claim(s) 38 and 39, drawn to SEQ ID NO: 6 (dlg-3).

Group 6, claim(s) 38 and 39, drawn to SEQ ID NO: 7 (nNOS).

Group 7, claim(s) 38 and 39, drawn to SEQ ID NO: 8 (inaD-3).

Group 8, claim(s) 38 and 39, drawn to SEQ ID NO: 9 (InaD-1).

Group 9, claim(s) 38 and 39, drawn to SEQ ID NO: 10 (inaD-1).

Group 10, claim(s) 38 and 39, drawn to SEQ ID NO: 11 (inaD-5).

Group 11, claim(s) 38 and 39, drawn to SEQ ID NO: 12 (inaD-2).

Group 12, claim(s) 38 and 39, drawn to SEQ ID NO: 13 (inaD-4).

Group 13, claim(s) 38 and 39, drawn to another PDZ domain-containing protein that binds to signal transduction proteins.

The inventions listed as Inventions I-XVII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: a single structure and function.

Art Unit: 1653

Applicant is advised that **the reply to this requirement to be complete must include an election of the invention and group** to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is advised that the claims should be amended to reflect the elected invention. That is, if SEQ ID NO: 10 does not bind a kinase, then kinase should be deleted from the list of options in claims drawn to signal transduction proteins, for example. This is simply an issue under 35 USC 112, 2nd paragraph, regarding claim clarity.

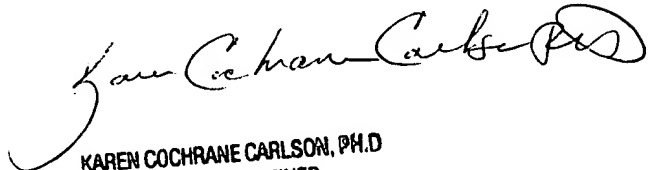
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Cochrane Carlson, Ph.D. whose telephone number is 703-308-0034. The examiner can normally be reached on 7:00 AM - 4:00 PM, off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Christopher Low can be reached on 703-308-2329. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

December 18, 2002


KAREN COCHRANE CARLSON, PH.D.
PRIMARY EXAMINER